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Sequence Listing was accepted.

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Timestamp: [year=2008; month=9; day=19; hr=16; min=11; sec=22; ms=759;]

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Application No: 10540959 Version No: 2.0

Input Set:

Output Set:

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Finished: 2008-08-21 20:25:41.003
Elapsed: 0 hr(s) 0 min(s) 0 sec(s) 800 ms
Total Warnings: 7
Total Errors: 0
No. of SeqIDs Defined: 9
Actual SeqID Count: 9

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SEQUENCE LISTING

<110> Rennert, Paul D.

<120> KIM-1 ANTAGONISTS AND USE TO MODULATE
IMMUNE SYSTEM

<130> 13751-0055US1

<140> 10540959

<141> 2006-04-04

<150> PCT/US2003/041294

<151> 2003-02-29

<150> US 60/436,934

<151> 2002-12-30

<160> 9

<170> FastSEQ for Windows Version 4.0

<210> 1

<211> 359

<212> PRT

<213> Homo sapiens

<400> 1

Met His Pro Gln Val Val Ile Leu Ser Leu Ile Leu His Leu Ala Asp
1 5 10 15
Ser Val Ala Gly Ser Val Lys Val Gly Gly Glu Ala Gly Pro Ser Val
20 25 30
Thr Leu Pro Cys His Tyr Ser Gly Ala Val Thr Ser Met Cys Trp Asn
35 40 45
Arg Gly Ser Cys Ser Leu Phe Thr Cys Gln Asn Gly Ile Val Trp Thr
50 55 60
Asn Gly Thr His Val Thr Tyr Arg Lys Asp Thr Arg Tyr Lys Leu Leu
65 70 75 80
Gly Asp Leu Ser Arg Arg Asp Val Ser Leu Thr Ile Glu Asn Thr Ala
85 90 95
Val Ser Asp Ser Gly Val Tyr Cys Cys Arg Val Glu His Arg Gly Trp
100 105 110
Phe Asn Asp Met Lys Ile Thr Val Ser Leu Glu Ile Val Pro Pro Lys
115 120 125
Val Thr Thr Thr Pro Ile Val Thr Val Pro Thr Val Thr Thr Val
130 135 140
Arg Thr Ser Thr Thr Val Pro Thr Thr Thr Val Pro Thr Thr Thr
145 150 155 160
Val Pro Thr Thr Met Ser Ile Pro Thr Thr Thr Thr Val Pro Thr Thr
165 170 175
Met Thr Val Ser Thr Thr Ser Val Pro Thr Thr Thr Ser Ile Pro
180 185 190
Thr Thr Thr Ser Val Pro Val Thr Thr Val Ser Thr Phe Val Pro
195 200 205
Pro Met Pro Leu Pro Arg Gln Asn His Glu Pro Val Ala Thr Ser Pro

210	215	220
Ser Ser Pro Gln Pro Ala Glu Thr His Pro Thr Thr Leu Gln Gly Ala		
225	230	235
Ile Arg Arg Glu Pro Thr Ser Ser Pro Leu Tyr Ser Tyr Thr Thr Asp		
245	250	255
Gly Asn Asp Thr Val Thr Glu Ser Ser Asp Gly Leu Trp Asn Asn Asn		
260	265	270
Gln Thr Gln Leu Phe Leu Glu His Ser Leu Leu Thr Ala Asn Thr Thr		
275	280	285
Lys Gly Ile Tyr Ala Gly Val Cys Ile Ser Val Leu Val Leu Leu Ala		
290	295	300
Leu Leu Gly Val Ile Ile Ala Lys Lys Tyr Phe Phe Lys Lys Glu Val		
305	310	315
Gln Gln Leu Ser Val Ser Phe Ser Ser Leu Gln Ile Lys Ala Leu Gln		
325	330	335
Asn Ala Val Glu Lys Glu Val Gln Ala Glu Asp Asn Ile Tyr Ile Glu		
340	345	350
Asn Ser Leu Tyr Ala Thr Asp		
355		

<210> 2

<211> 334

<212> PRT

<213> Homo sapiens

<400> 2

Met His Pro Gln Val Val Ile Leu Ser Leu Ile Leu His Leu Ala Asp		
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Ser Val Ala Gly Ser Val Lys Val Gly Gly Glu Ala Gly Pro Ser Val		
20	25	30
Thr Leu Pro Cys His Tyr Ser Gly Ala Val Thr Ser Met Cys Trp Asn		
35	40	45
Arg Gly Ser Cys Ser Leu Phe Thr Cys Gln Asn Gly Ile Val Trp Thr		
50	55	60
Asn Gly Thr His Val Thr Tyr Arg Lys Asp Thr Arg Tyr Lys Leu Leu		
65	70	75
Gly Asp Leu Ser Arg Arg Asp Val Ser Leu Thr Ile Glu Asn Thr Ala		
85	90	95
Val Ser Asp Ser Gly Val Tyr Cys Cys Arg Val Glu His Arg Gly Trp		
100	105	110
Phe Asn Asp Met Lys Ile Thr Val Ser Leu Glu Ile Val Pro Pro Lys		
115	120	125
Val Thr Thr Thr Pro Ile Val Thr Thr Val Pro Thr Val Thr Thr Val		
130	135	140
Arg Thr Ser Thr Thr Val Pro Thr Thr Thr Val Pro Thr Thr Thr		
145	150	155
Val Pro Thr Thr Met Ser Ile Pro Thr Thr Thr Val Pro Thr Thr		
165	170	175
Met Thr Val Ser Thr Thr Ser Val Pro Thr Thr Thr Ser Ile Pro		
180	185	190
Thr Thr Thr Ser Val Pro Val Thr Thr Val Ser Thr Phe Val Pro		
195	200	205
Pro Met Pro Leu Pro Arg Gln Asn His Glu Pro Val Ala Thr Ser Pro		
210	215	220
Ser Ser Pro Gln Pro Ala Glu Thr His Pro Thr Thr Leu Gln Gly Ala		
225	230	235
Ile Arg Arg Glu Pro Thr Ser Ser Pro Leu Tyr Ser Tyr Thr Thr Asp		

245	250	255	
Gly Asn Asp Thr Val Thr Glu Ser Ser Asp Gly Leu Trp Asn Asn Asn			
260	265	270	
Gln Thr Gln Leu Phe Leu Glu His Ser Leu Leu Thr Ala Asn Thr Thr			
275	280	285	
Lys Gly Ile Tyr Ala Gly Val Cys Ile Ser Val Leu Val Leu Leu Ala			
290	295	300	
Leu Leu Gly Val Ile Ile Ala Lys Lys Tyr Phe Phe Lys Lys Glu Val			
305	310	315	320
Gln Gln Leu Arg Pro His Lys Ser Cys Ile His Gln Arg Glu			
325	330		

<210> 3
 <211> 518
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Human KIM-1 Extracellular Domain Fc Construct

<400> 3			
Met His Pro Gln Val Val Ile Leu Ser Leu Ile Leu His Leu Ala Asp			
1	5	10	15
Ser Val Ala Gly Ser Val Lys Val Gly Gly Glu Ala Gly Pro Ser Val			
20	25	30	
Thr Leu Pro Cys His Tyr Ser Gly Ala Val Thr Ser Met Cys Trp Asn			
35	40	45	
Arg Gly Ser Cys Ser Leu Phe Thr Cys Gln Asn Gly Ile Val Trp Thr			
50	55	60	
Asn Gly Thr His Val Thr Tyr Arg Lys Asp Thr Arg Tyr Lys Leu Leu			
65	70	75	80
Gly Asp Leu Ser Arg Arg Asp Val Ser Leu Thr Ile Glu Asn Thr Ala			
85	90	95	
Val Ser Asp Ser Gly Val Tyr Cys Cys Arg Val Glu His Arg Gly Trp			
100	105	110	
Phe Asn Asp Met Lys Ile Thr Val Ser Leu Glu Ile Val Pro Pro Lys			
115	120	125	
Val Thr Thr Thr Pro Ile Val Thr Thr Val Pro Thr Val Thr Thr Val			
130	135	140	
Arg Thr Ser Thr Thr Val Pro Thr Thr Thr Val Pro Thr Thr Thr			
145	150	155	160
Val Pro Thr Thr Met Ser Ile Pro Thr Thr Thr Thr Val Pro Thr Thr			
165	170	175	
Met Thr Val Ser Thr Thr Ser Val Pro Thr Thr Thr Ser Ile Pro			
180	185	190	
Thr Thr Thr Ser Val Pro Val Thr Thr Val Ser Thr Phe Val Pro			
195	200	205	
Pro Met Pro Leu Pro Arg Gln Asn His Glu Pro Val Ala Thr Ser Pro			
210	215	220	
Ser Ser Pro Gln Pro Ala Glu Thr His Pro Thr Thr Leu Gln Gly Ala			
225	230	235	240
Ile Arg Arg Glu Pro Thr Ser Ser Pro Leu Tyr Ser Tyr Thr Thr Asp			
245	250	255	
Gly Asn Asp Thr Val Thr Glu Ser Ser Asp Gly Leu Trp Asn Asn Asn			
260	265	270	
Gln Thr Gln Leu Phe Leu Glu His Ser Leu Leu Thr Ala Asn Thr Thr			
275	280	285	

Lys Gly Val Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu
 290 295 300
 Leu Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp
 305 310 315 320
 Thr Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp
 325 330 335
 Val Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly
 340 345 350
 Val Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn
 355 360 365
 Ser Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp
 370 375 380
 Leu Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro
 385 390 395 400
 Ala Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu
 405 410 415
 Pro Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn
 420 425 430
 Gln Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile
 435 440 445
 Ala Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr
 450 455 460
 Thr Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys
 465 470 475 480
 Leu Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys
 485 490 495
 Ser Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu
 500 505 510
 Ser Leu Ser Pro Gly Lys
 515

<210> 4
 <211> 357
 <212> PRT
 <213> Artificial Sequence

<220>
 <223> Human KIM-1 Partial Extracellular Domain Fc
 Construct

<400> 4
 Met His Pro Gln Val Val Ile Leu Ser Leu Ile Leu His Leu Ala Asp
 1 5 10 15
 Ser Val Ala Gly Ser Val Lys Val Gly Gly Glu Ala Gly Pro Ser Val
 20 25 30
 Thr Leu Pro Cys His Tyr Ser Gly Ala Val Thr Ser Met Cys Trp Asn
 35 40 45
 Arg Gly Ser Cys Ser Leu Phe Thr Cys Gln Asn Gly Ile Val Trp Thr
 50 55 60
 Asn Gly Thr His Val Thr Tyr Arg Lys Asp Thr Arg Tyr Lys Leu Leu
 65 70 75 80
 Gly Asp Leu Ser Arg Arg Asp Val Ser Leu Thr Ile Glu Asn Thr Ala
 85 90 95
 Val Ser Asp Ser Gly Val Tyr Cys Cys Arg Val Glu His Arg Gly Trp
 100 105 110
 Phe Asn Asp Met Lys Ile Thr Val Ser Leu Glu Ile Val Pro Pro Lys
 115 120 125

Val Val Asp Lys Thr His Thr Cys Pro Pro Cys Pro Ala Pro Glu Leu
130 135 140
Leu Gly Gly Pro Ser Val Phe Leu Phe Pro Pro Lys Pro Lys Asp Thr
145 150 155 160
Leu Met Ile Ser Arg Thr Pro Glu Val Thr Cys Val Val Val Asp Val
165 170 175
Ser His Glu Asp Pro Glu Val Lys Phe Asn Trp Tyr Val Asp Gly Val
180 185 190
Glu Val His Asn Ala Lys Thr Lys Pro Arg Glu Glu Gln Tyr Asn Ser
195 200 205
Thr Tyr Arg Val Val Ser Val Leu Thr Val Leu His Gln Asp Trp Leu
210 215 220
Asn Gly Lys Glu Tyr Lys Cys Lys Val Ser Asn Lys Ala Leu Pro Ala
225 230 235 240
Pro Ile Glu Lys Thr Ile Ser Lys Ala Lys Gly Gln Pro Arg Glu Pro
245 250 255
Gln Val Tyr Thr Leu Pro Pro Ser Arg Asp Glu Leu Thr Lys Asn Gln
260 265 270
Val Ser Leu Thr Cys Leu Val Lys Gly Phe Tyr Pro Ser Asp Ile Ala
275 280 285
Val Glu Trp Glu Ser Asn Gly Gln Pro Glu Asn Asn Tyr Lys Thr Thr
290 295 300
Pro Pro Val Leu Asp Ser Asp Gly Ser Phe Phe Leu Tyr Ser Lys Leu
305 310 315 320
Thr Val Asp Lys Ser Arg Trp Gln Gln Gly Asn Val Phe Ser Cys Ser
325 330 335
Val Met His Glu Ala Leu His Asn His Tyr Thr Gln Lys Ser Leu Ser
340 345 350
Leu Ser Pro Gly Lys
355

<210> 5
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> C-terminal peptide for Human KIM-1 Extracellular
Domain Histag Construct

<400> 5
Val Glu His His His His His
1 5

<210> 6
<211> 8
<212> PRT
<213> Artificial Sequence

<220>
<223> Synthetically generated peptide

<400> 6
Asp Tyr Lys Asp Asp Asp Asp Lys
1 5

<210> 7

<211> 298
<212> PRT
<213> Artificial Sequence

<220>
<223> Human KIM-1 Extracellular Domain Histag Construct

<400> 7
Met His Pro Gln Val Val Ile Leu Ser Leu Ile Leu His Leu Ala Asp
1 5 10 15
Ser Val Ala Gly Ser Val Lys Val Gly Gly Glu Ala Gly Pro Ser Val
20 25 30
Thr Leu Pro Cys His Tyr Ser Gly Ala Val Thr Ser Met Cys Trp Asn
35 40 45
Arg Gly Ser Cys Ser Leu Phe Thr Cys Gln Asn Gly Ile Val Trp Thr
50 55 60
Asn Gly Thr His Val Thr Tyr Arg Lys Asp Thr Arg Tyr Lys Leu Leu
65 70 75 80
Gly Asp Leu Ser Arg Arg Asp Val Ser Leu Thr Ile Glu Asn Thr Ala
85 90 95
Val Ser Asp Ser Gly Val Tyr Cys Cys Arg Val Glu His Arg Gly Trp
100 105 110
Phe Asn Asp Met Lys Ile Thr Val Ser Leu Glu Ile Val Pro Pro Lys
115 120 125
Val Thr Thr Thr Pro Ile Val Thr Thr Val Pro Thr Val Thr Thr Val
130 135 140
Arg Thr Ser Thr Thr Val Pro Thr Thr Thr Val Pro Thr Thr Thr
145 150 155 160
Val Pro Thr Thr Met Ser Ile Pro Thr Thr Thr Val Pro Thr Thr
165 170 175
Met Thr Val Ser Thr Thr Ser Val Pro Thr Thr Thr Ser Ile Pro
180 185 190
Thr Thr Thr Ser Val Pro Val Thr Thr Thr Val Ser Thr Phe Val Pro
195 200 205
Pro Met Pro Leu Pro Arg Gln Asn His Glu Pro Val Ala Thr Ser Pro
210 215 220
Ser Ser Pro Gln Pro Ala Glu Thr His Pro Thr Thr Leu Gln Gly Ala
225 230 235 240
Ile Arg Arg Glu Pro Thr Ser Ser Pro Leu Tyr Ser Tyr Thr Thr Asp
245 250 255
Gly Asn Asp Thr Val Thr Glu Ser Ser Asp Gly Leu Trp Asn Asn Asn
260 265 270
Gln Thr Gln Leu Phe Leu Glu His Ser Leu Leu Thr Ala Asn Thr Thr
275 280 285
Lys Gly Val Glu His His His His His His
290 295

<210> 8
<211> 1398
<212> DNA
<213> Artificial Sequence

<220>
<223> Human KIM-1 Extracellular Domain Fc Construct Fc

<400> 8
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tcttatgtgg aagtaaagggg ggtagtggtt caccctgtca cacttccatg tacttactca	120
acatatcgta gaatcacaac gacatgtgg ggccgagggc aatgcccac ttcgtctgt	180
caaaatacac ttatttggac caatggacat cgtgtcacct atcagaagag cagtcggac	240
aacttaaagg ggcataatttc agaaggagat gtgtccctga cgatagagaa ctctgtttag	300
agtgcacagt gtctgttattt ttgtcgagt gatggttaa tgatcagaaa	360
gtgacccctt cattgcaagt taaaccagag attcccacac gtcctccaac aagaccac	420
actacaaggc ccacagctac aggaagaccc acgactattt caacaagatc cacacatgt	480
ccaacatcaa tcagagtctc tacctccact cctccaaacat ctacacacac atggactcac	540
aaaccagaac ccactacatt ttgtccccat gagacaacag ctgaggtgac aggaatccca	600
tcccatactc ctacagactg gaatggact ggcacatctc caggagatac ctggagtaat	660
cacactgaag caatccctcc agggaaaggcc cagaaaaacc ctactaaggc cgtcgacaaa	720
actcacacat gcccaccgtg cccagcacct gaactcctgg ggggaccgtc agtcttctc	780
ttccccccaa aacccaagga caccctcatg atctcccgga cccctgaggt cacatgcgt	840
gtggtggacg tgagccacga agaccctgag gtcaagttca actggtaacgt ggacggcgt	900
gaggtgcata atgccaagac aaagccgcgg gaggagcagt acaacagcac gtaccgtgt	960
gtcagcgtcc tcaccgtctc gcaccaggac tggctgaatg gcaaggagta caagtgcac	1020
gtctccaaaca aagccctccc agccccatc gagaaaacca tctccaaagc caaaggccag	1080
ccccgagaac cacaggtgta caccctgccc ccattccggg atgagctgac caagaaccag	1140
gtcagcctga cctgcctggt caaaggcttc tatcccagcg acatcgccgt ggagtggag	1200
agcaatgggc agccggagaa caactacaag accacgcctc ccgtgttggc ctccgacggc	1260
tccttcttcc tctacagcaa gctcaccgtg gacaagagca ggtggcagca ggggaacgtc	1320
ttctcatgtc ccgtgatgca tgaggctctg cacaaccact acacgcagaa gagcctctcc	1380
ctgtctcccg ggaaatga	1398

<210> 9
<211> 465
<212> PRT
<213> Artificial Sequence

<220>
<223> KIM-1 Fc Fusion

<400> 9
Met Asn Gln Ile Gln Val Phe Ile Ser Gly Leu Ile Leu Leu Pro
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Gly Thr Val Asp Ser Tyr Val Glu Val Lys Gly Val Val Gly His Pro
20 25 30
Val Thr Leu